REMARKS

Pursuant to 37 C.F.R. § 1.111, Applicants respectfully request reconsideration the claim rejections set forth in the Office Action dated September 15, 2006.

Summary

Claims 1, 3, 5, 7, 8, and 10 are currently amended. No new matter has been added as a result.

Claims 2, 4, 6, and 9 are cancelled.

Claims 18 – 19 are added. No new matter has been added as a result.

Claims 1, 3, 5, 7 - 8, and 10 - 19 are currently pending.

Allowable Subject Matter

Claims 2, 3, 6, 8 and 9 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections – 35 U.S.C. § 112

Claim 16 was rejected pursuant to 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. Claim 16 recites, *inter alia*, the length of the second coil segment in a first direction orthogonal to the direction of electric current is larger than the length of the first coil segment in the first direction. The originally filed specification recites "the length of the second coil segment in a first direction orthogonal to the direction of electric current is larger than the length of the first coil segment in the first direction to minimize heat generation from the coil" (page 10; lines 10 - 14). In addition, the original specification recites "The length W2 of the second coil segments 556 in a first direction orthogonal to the direction of an electric current flow is larger than the length W2 of the first coil segments 555 in the first direction" (page 52, lines 6 - 10). Therefore, the specification describes the claimed subject matter in such a way as to enable one skilled in the art to which it pertains to make and/or use the subject matter.

Claim Rejections - 35 U.S.C. § 102

Claims 1 and 12 – 15 were rejected pursuant to 35 U.S.C. § 102(b) as being anticipated by Cohen et al. (U.S. Patent 5,995,342). Claims 4, 5, 16, and 17 were rejected pursuant to 35 U.S.C. § 103(a) as being unpatentable over Cohen et al. in view of Komuro et al. (U.S. Patent No. 6,530,141).

Claim 1 is currently amended to incorporate the features of allowable claim 2. Therefore, claim 1 is allowable for at least the same reasons that claim 2 was allowable. Dependent claims 3, 7 - 8, and 11 - 17 depend from allowable claim 1, so are allowable for at least these reasons.

Claim 18 is currently added. Claim 18 recites the features of base claim 1, intervening claim 4, and allowable claim 6. Therefore, claim 18 is allowable for at least the same reasons that claim 6 was allowable. Dependent claim 5 depends from allowable claim 18, so is allowable for at least this reason.

Claim 19 is currently added. Claim 19 recites the features of base claim 1 and allowable claim 9. Therefore, claim 19 is allowable for at least the same reasons that claim 9 was allowable. Dependent claim 10 depends from allowable claim 18, so is allowable for at least this reason.

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CONCLUSION

For at least the reasons presented above, the Applicants respectfully submit that the pending claims are in condition for allowance.

The Examiner is respectfully requested to contact the undersigned in the event that a telephone interview would expedite consideration of the application.

Respectfully submitted,

Sustavo Siller,

Registration No. 32,305 Attorney for Applicants

BRINKS HOFER GILSON & LIONE P.O. BOX 10395 CHICAGO, ILLINOIS 60610 (312) 321-4200